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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/771,794	02/04/2004	Katsuhiro Wada	B422-255	3353
26272 7590 07/09/2007 COWAN LIEBOWITZ & LATMAN P.C. JOHN J TORRENTE 1133 AVE OF THE AMERICAS NEW YORK, NY 10036			EXAMINER JONES, HEATHER RAE	
			ART UNIT 2621	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/771,794	Applicant(s) WADA, KATSUHIRO	
	Examiner Heather R. Jones	Art Unit 2621	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 February 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04 February 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>10/11/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Drawings

2. The drawings are objected to because in Fig. 4 the one reference character "403V" pointing to the A should be labeled --403A--.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7, 9-16, and 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higurashi et al. (U.S. Patent 6,108,148) in view of Okuyama (U.S. Patent 6,366,630).

Regarding claim 1, Higurashi et al. discloses a reproducing apparatus comprising: reproducing means for reproducing moving image data for normal reproduction and image data for high-speed reproduction from a recording medium which records thereon moving image data train including the moving image data for normal reproduction which is encoded by using intra-frame coding and inter-frame coding and the image data for high-speed reproduction (Fig. 7; col. 9, lines 29-32 and 40-65). However, Higurashi et al. fails to disclose an interface which multiplexes and outputs in a form of encoded data the moving image data for normal reproduction and the image data for high-speed reproduction, each of which is reproduced by the reproducing means.

Referring to the Okuyama reference, Okuyama discloses a reproducing apparatus comprising an interface that which multiplexes the signal and outputs

the signal to another recording/reproducing apparatus (Figs. 7 and 8; col. 1, lines 8-11; col. 8, lines 36-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided an interface connecting two recording/reproducing apparatuses as taught by Okuyama with the reproducing apparatus disclosed by Higurashi et al. in order to allow the user to back up their videos for safe keeping. Furthermore, once Higurashi's apparatus has an interface to connect to other apparatuses then that interface multiplexes and outputs in a form of encoded data the moving image data for normal reproduction and the image data for high-speed reproduction.

Regarding claim 2, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 1 including that the interface converts the moving image data for normal reproduction and the image data for high-speed reproduction into a plurality of packets having a data size of a predetermined amount respectively, and the interface multiplexes and outputs the plurality of packets (Okuyama: Fig.11 displays the packets).

Regarding claim 3, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 1 including that each of the plurality of packets includes ID data, and the interface allocates predetermined values different from each other to the ID data of the packet of the moving image data for normal reproduction and the ID data of the packet of the

image data for high-speed reproduction (Higurashi et al. discloses that the packets have two different IDs – Fig. 7 – ID detector (43)).

Regarding claim 4, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 1 as well as disclosing the reproducing apparatus further comprises controlling means (45) for controlling whether the image data for high-speed reproduction is multiplexed and output or not, in accordance with a status of an apparatus to which the moving image data for normal reproduction and the image data for high-speed reproduction are to be output (Higurashi et al.: col. 9, lines 40-65).

Regarding claim 5, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claims 1 and 4 including that the interface detects information stored in a predetermined register of the apparatus to which the moving image data for normal reproduction and the image data for high-speed reproduction are to be output, while the interface outputs the moving image data for normal reproduction and the image data for high-speed reproduction pursuant to an IEEE1394 standard, and the controlling means controls whether the image data for high-speed reproduction is multiplexed and output or not, in accordance with the information detected by the interface (Higurashi et al.: Fig. 7; col. 9, lines 40-65; Okuyama: Figs. 7, 8, and 11 discloses how the IEEE1394 connection works).

Regarding claim 6, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 1 as well as disclosing

that the reproduction apparatus further comprises decoding means for decoding the moving image data for normal reproduction and the image data for high-speed reproduction, each of which is reproduced by the reproducing means, and for selecting and outputting one of the decoded moving image data for normal reproduction and the decoded image data for high-speed reproduction (Higurashi et al.: Fig. 7 – the signal reproduce (42) decodes the signal from the recording medium, the controller (45) selects which output to use).

Regarding claim 7, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claims 1 and 6 including that the interface further receives a transmission data train, in which the moving image data for normal reproduction and the image data for high-speed reproduction are multiplexed in a form of encoded data, through a transmission line and detects the moving image data for normal reproduction and the image data for high-speed reproduction from the received transmission data train to output the detected data to the decoding means (Okuyama: Fig. 8 discloses that the interface (32) separates the data signals from the reference signals).

Regarding claim 9, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 1 including that the recording medium includes a tape-shaped recording medium, and the moving image data for normal reproduction and the image data for high-speed reproduction are recorded in a plurality of tracks formed on the tape-shaped recording medium (Higurashi et al: col. 2, lines 57-67).

Regarding claim **10**, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claims 1 and 9 including that the image data for high-speed reproduction is recorded at a position corresponding to a scanning trajectory of a reproducing head in high-speed reproduction within the plurality of tracks (Higurashi et al.: Fig. 1; col. 1, lines 68-63; col. 2, lines 23-30).

Regarding claim **11**, Higurashi et al. discloses a recording apparatus comprising: encoding means for encoding moving image data by using intra-frame coding and inter-frame coding to generate the moving image data for normal reproduction, and generating image data for high-speed reproduction by using a part of the moving image data for normal reproduction (Fig. 6), recording means (11) for forming a plurality of tracks on a tape-shaped recording medium and recording the moving image data for normal reproduction and the image data for high-speed reproduction, each of which is generated by the encoding means, in the plurality of tracks (Fig. 10). However, Higurashi et al. fails to disclose an interface which multiplexes and outputs in a form of encoded data the moving image data for normal reproduction and the image data for high-speed reproduction, each of which is generated by the encoding means.

Referring to the Okuyama reference, Okuyama discloses a reproducing apparatus comprising an interface that which multiplexes the signal and outputs the signal to another recording/reproducing apparatus (Figs. 7 and 8; col. 1, lines 8-11; col. 8, lines 36-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided an interface connecting two recording/reproducing apparatuses as taught by Okuyama with the reproducing apparatus disclosed by Higurashi et al. in order to allow the user to back up their videos for safe keeping. Furthermore, once Higurashi's apparatus has an interface to connect to other apparatuses then that interface multiplexes and outputs in a form of encoded data the moving image data for normal reproduction and the image data for high-speed reproduction, each of which is generated by the encoding means.

Regarding claim **12**, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 11 including that the recording means records the image data for high-speed reproduction at a predetermined position decided in the each track (Higurashi et al.: Fig. 1; col. 1, lines 68-63; col. 2, lines 23-30).

Regarding claim **13**, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claims 11 and 12 including that the recording means records the image data for high-speed reproduction at a position corresponding to a scanning trajectory of a head in high-speed reproduction within the plurality of tracks (Higurashi et al.: Fig. 1; col. 1, lines 68-63; col. 2, lines 23-30).

Regarding claim **14**, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 11 wherein the interface

converts each of the moving image data for normal reproduction and the image data for high-speed reproduction into a plurality of packets having a data size of a predetermined amount and multiplexes and outputs the plurality of packets (Okuyama: Fig.11 displays the packets).

Regarding claim **15**, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claims 11 and 14, wherein each of the plurality of packets includes ID data, and the interface allocates predetermined values different from each other to the ID data of the packet of the moving image data for normal reproduction and an ID data of the packet of the image data for high-speed reproduction (Higurashi et al. discloses that the packets have two different IDs – Fig. 7 – ID detector (43)).

Regarding claim **16**, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 11 including that the interface further receives a transmission data train, in which the moving image data for normal reproduction and the image data for high-speed reproduction are multiplexed while are encoded, from an external apparatus, and the recording means further records the moving image data for normal reproduction and the image data for high-speed reproduction, each of which is received by the interface (Okuyama: Fig. 8 discloses that the interface (32) separates the data signals from the reference signals).

Regarding claim **18**, Higurashi et al. discloses a reproducing apparatus comprising: reproducing means for reproducing image data for normal

reproduction and image data for high-speed reproduction from a recording medium on which a plurality of tracks are formed, in which tracks a moving image data train including the moving image data for normal reproduction which is encoded pursuant to a packetized elementary stream format of MPEG2, and the image data for high-speed reproduction corresponding to the moving image data for normal reproduction (Fig. 7; col. 5, lines 1-4; col. 9, lines 29-32 and 40-65). However, Higurashi et al. fails to disclose an interface which multiplexes and outputs in a form of the transport stream format of MPEG2 the moving image data for normal reproduction of a packetized elementary stream format and the image data for high-speed reproduction of the packetized elementary stream format, each of which is reproduced by the reproducing means.

Referring to the Okuyama reference, Okuyama discloses a reproducing apparatus comprising an interface that which multiplexes the signal and outputs the signal to another recording/reproducing apparatus (Figs. 7 and 8; col. 1, lines 8-11; col. 8, lines 36-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided an interface connecting two recording/reproducing apparatuses as taught by Okuyama with the reproducing apparatus disclosed by Higurashi et al. in order to allow the user to back up their videos for safe keeping. Furthermore, once Higurashi's apparatus has an interface to connect to other apparatuses then that interface multiplexes and outputs in a form of the transport stream format of MPEG2 the moving image

data for normal reproduction of a packetized elementary stream format and the image data for high-speed reproduction of the packetized elementary stream format, each of which is reproduced by the reproducing means.

Regarding claim **19**, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 18 including that the interface allocates values different from each other to a packet ID of a transport stream packet of the moving image data for normal reproduction and a packet ID of the transport stream packet of the image data for high-speed reproduction (Higurashi et al. discloses that the packets have two different IDs – Fig. 7 – ID detector (43)).

Regarding claim **20**, Higurashi et al. discloses a reproducing apparatus comprising: reproducing means for reproducing moving image data for normal reproduction and image data for high-speed reproduction from a recording medium which records thereon a moving image data train including the encoded moving image data for normal reproduction and the image data for high-speed reproduction which is generated by using a part of the moving image data for normal reproduction; decoding means for decoding the moving image data for normal reproduction and the image data for high-speed reproduction, each of which is reproduced by the reproducing means, the decoding means outputting the moving image data for normal reproduction in a normal reproducing mode and selecting and outputting, the image data for high-speed reproduction in a rapid reproducing mode (Fig. 7; col. 5, lines 1-4; col. 9, lines 29-32 and 40-65).

However, Higurashi et al. fails to disclose an interface that multiplexes and output in a form of encoded data the moving image data for normal reproduction and the image data for high-speed reproduction each of which is reproduced by the reproducing means.

Referring to the Okuyama reference, Okuyama discloses a reproducing apparatus comprising an interface that which multiplexes the signal and outputs the signal to another recording/reproducing apparatus (Figs. 7 and 8; col. 1, lines 8-11; col. 8, lines 36-42).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided an interface connecting two recording/reproducing apparatuses as taught by Okuyama with the reproducing apparatus disclosed by Higurashi et al. in order to allow the user to back up their videos for safe keeping. Furthermore, once Higurashi's apparatus has an interface to connect to other apparatuses then that interface multiplexes and outputs in a form of encoded data the moving image data for normal reproduction and the image data for high-speed reproduction each of which is reproduced by the reproducing means.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 8 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Higurashi et al. in view of Okuyama as applied to claim 1 above, and further in view of Lane (U.S. Patent 6,031,960).

Regarding claim 8, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 1, but fail to disclose that the image data for high-speed reproduction includes only image data of a frame encoded by the intra-frame coding among the moving image data for normal reproduction.

Referring to the Lane reference, Lane discloses an apparatus wherein the image data for high-speed reproduction includes only image data of a frame encoded by the intra-frame coding among the moving image data for normal reproduction (col. 6, lines 36-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have only used I-frames for trick play as disclosed by Lane in the apparatus disclosed by Higurashi et al. in view of Okuyama in order to have easily provide trick play where the entire image comes through on a stand alone basis, the I-frames do not need the help from other frames in order to be decoded.

Regarding claim 17, Higurashi et al. in view of Okuyama discloses all the limitations as previously discussed with respect to claim 11, but fail to disclose that the image data for high-speed reproduction includes only image data of a

frame encoded by the intra-frame coding among the moving image data for normal reproduction.

Referring to the Lane reference, Lane discloses an apparatus wherein the image data for high-speed reproduction includes only image data of a frame encoded by the intra-frame coding among the moving image data for normal reproduction (col. 6, lines 36-43).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have only used I-frames for trick play as disclosed by Lane in the apparatus disclosed by Higurashi et al. in view of Okuyama in order to have easily provide trick play where the entire image comes through on a stand alone basis, the I-frames do not need the help from other frames in order to be decoded.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Heather R. Jones whose telephone number is 571-272-7368. The examiner can normally be reached on Mon. - Thurs.: 7:00 am - 4:30 pm, and every other Fri.: 7:00 am - 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Miller can be reached on 571-272-7353. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Heather R Jones
Examiner
Art Unit 2621

HRJ
June 25, 2007



JOHN MILLER
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